# Mäesuusatajate ja lumelaudurite kiivrid

Helmets for alpine skiers and snowboarders



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1077:2007 sisaldab Euroopa standardi EN 1077:2007 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.10.2007 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on .

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1077:2007 consists of the English text of the European standard EN 1077:2007.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2007 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text.

The standard is available from Estonian standardisation organisation.

ICS 13.340.20

**Võtmesõnad:** efektiivsus, kiivrid, kinnitusvahendid, läbistamistestid, löögikindlus, mäesuusad, märgistamine, määratlused, nägemisväli, spordialad, testid, varustuse tehnilised andmed, vastupidavus, õnnetuse vältimine

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN 1077** 

August 2007

ICS 13.340.20

Supersedes EN 1077:1996

#### **English Version**

# Helmets for alpine skiers and snowboarders

Casques pour skieurs de ski alpin et de surf nes neiges

Helme für alpine Skiläufer und für Snowboarder

This European Standard was approved by CEN on 17 February 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# **Foreword**

This document (EN 1077:2007) has been prepared by Technical Committee CEN/TC 158 "Head protection", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2008, and conflicting national standards shall be withdrawn at the latest by February 2008.

This document supersedes EN 1077:1996.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 89/686/EEC.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Jan Polan Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

# Introduction

The intention of helmets is to reduce the risk of injury to the skull and part of the head surrounded by the helmet.

The protection given by a helmet depends on the circumstances of the accident and wearing a helmet cannot always prevent death or long term disability.

A proportion of the energy of an impact is absorbed by the helmet, thereby reducing the force of the blow sustained by the head. The structure of the helmet may be damaged in absorbing this energy and any helmet that sustains a severe blow should be replaced even if damage is not apparent.

To achieve the performance of which it is capable, and to ensure stability on the head, a helmet should be as closely fitting as possible consistent with comfort. In use it is essential that the helmet is securely fastened, with any chin strap under proper tension at all times.

Although the experience of the existing standard for alpine skiers is very good, it has become more and more obvious that there is a need for an alternative standard that can meet the demand from skiers and snowboarders who desire more ventilation and better hearing. This has resulted in two classes of helmets, 355 class A and class B. Compared to class B, class A protects a larger area of the head and offers a higher degree of protection from penetration.

## 1 Scope

This European Standard is applicable to performance requirements and tests for two classes of helmets for alpine skiers, snowboarders and for similar groups, including children and participants in competitions. The standard comprises two different classes of protection, class A and class B.

Requirements and the corresponding methods of test, where appropriate, are given for the following:

- construction including field of vision;
- shock absorbing properties;
- resistance to penetration;
- retention system properties;
- marking and information.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 960, Headforms for use in the testing of protective helmets

EN 13087-2:2000, Protective helmets — Test methods — Part 2: Shock absorption

EN 13087-3:2000, Protective helmets — Test methods — Part 3: Resistance to penetration

EN 13087-4:2000, Protective helmets — Test methods — Part 4: Retention system effectiveness

EN 13087-5:2000, Protective helmets — Test methods — Part 5: Retention system strength

EN 13087-6, Protective helmets — Test methods — Part 6: Field of vision

# 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

### protective helmet

item to be worn on the head, intended to absorb the energy of a foreseeable impact thus reducing the risk of injury to the head

#### 3.2

#### shel

outer layer which provides part of the whole general form of the helmet

#### 3.3

#### helmet type

category of helmets which does not differ in such essential respects as the materials or dimensions or construction of the helmet, or of the retention system